

FLADE GAS TURBINE ENGINE WITH FIXED GEOMETRY INLET

ABSTRACT

5 An aircraft propulsion system includes a gas
turbine engine having a fan section, at least one row
of FLADE fan blades disposed radially outwardly of
and drivingly connected to the fan section, the row
of FLADE fan blades radially extending across a FLADE
duct circumscribing the fan section, an engine inlet
including a fan inlet to the fan section and an
10 annular FLADE inlet to the FLADE duct. A fixed
geometry inlet duct is in direct flow communication
with the engine inlet. The fan section may include
only a single direction of rotation fan or
alternatively axially spaced apart first and second
15 counter-rotatable fans in which the FLADE fan blades
are drivingly connected to one of the first and
second counter-rotatable fans. The row of FLADE fan
blades may be disposed between rows of variable first
and second FLADE vanes.